

MANAGING ELECTRONIC RESOURCES THROUGH CHALLENGING TIMES

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ABSTRACTS

E-Resources have become fundamental scholarly resources for libraries due to drastic development in publishing ecosystems. Growing numbers of scholarly journals and books are made available via online platforms either by publishers or online aggregators. As expected, many academic libraries in Malaysia are migrating from developing and maintaining conventional collections to managing electronic resources, to provide better access to scholarly contents among library users. Unquestionably, excellent features of online platforms have successfully contributed towards resource optimization in higher education institutions. Moreover, these platforms are fully equipped with automatic recordings of logins, searches and full-text downloads to allow qualitative assessment of e-resources. Other plugins and applications were installed by libraries to manage remote access to e-resources that successfully lead to realization of digital library component in academic institutions. While access to scholarly contents has been improved tremendously, libraries are facing with many uncertainties in managing electronic resources. These include ownership issues, access control, access rights, licensing policies, copyright restrictions and most importantly, pricing models and schemes. Major publishers are imposing on Big deal packages that provide access to greater number of journal titles directly from publishers' platforms. Apparently, Big deal packages have become increasingly serious problems due to its inflexibility to cater libraries in numerous scales and focuses. As library budgets have fallen relatively, libraries are facing huge challenges to maintain subscriptions to increasing subscription cost of Big deal packages. This paper aims to explore concepts of Big deal packages, issues and challenges and possible solutions for libraries during challenging financial times.

INTRODUCTION

Electronic resources and its huge digital contents have significantly changed the process of information discovery among library users. Value added features including powerful search engines, dynamic and user friendly platforms,

personalisation facets have successfully served as advanced tools to support teaching-learning and research activities. Its ability to complement 24/7 access to scholarly contents is among the most powerful features of e-resources in the academic settings. Libraries continue to invest on developing huge collections of e-resources while maintaining access to scholarly contents.

Undoubtedly, library spending on subscription to e-resources is growing at the rate of 8-10% annually with additional subscription cost is directed to platform maintenance. Undoubtedly, optimizing e-resources has helped the library community to enhance quality access to scholarly contents. Over the years, promoting use of e-resources through user education program, information literacy approach and strategic library campaigns are successfully influencing users' preferences towards digital contents. Libraries across the globe observed greater increase of e-resource utilization in terms of number of searches, number of sessions and full-text downloads while borrowing transactions of printed collections are dramatically reduced.

Demand towards e-resources among academic and students community is getting stronger and libraries are obliged to secure access for long term utilization. This scenario led to major challenges to libraries as subscription to licensed contents are costly and required long term commitment of budget expenditures. In Universiti Malaysia Perlis or UniMAP, 82 percent of its total collection development budget is spent on electronic resources. Within ten years (2007-2016), print book budgets are declining and huge amount of financial resources are used to support the increased costs of e-resources. During challenging economic situations, academic libraries are facing significant budget cuts and this is seriously affecting ability to secure access to licensed electronic contents.

ELECTRONIC RESOURCES IN THE MALAYSIAN PUBLIC UNIVERSITIES: A BRIEF BACKGROUND

Electronic journals (e-journals) were introduced to the Malaysian Public Universities in various mediums and subscription package. Access to e-journals via CD-ROM network was made available in most established public universities and continues to stabilize in the Internet environment. In the beginning, e-journals were optimized by

academic libraries to complement access to printed journals. Libraries were willing to pay higher price for combo subscription package offering access to both printed and electronic journals. Indeed, e-journals remarkably provide better experience to both libraries and users in terms of speed of access and delivery.

“Ten years ago, we noted other weaknesses in the print system of publication. Print journals are often times slow to appear (the time from submission to publication can be many months), and they come to libraries through a distribution system replete with pitfalls, not the least of which are contributed by the world’s postal systems.” (Ann Okerson, 2000).

Concerns over access versus ownership were observed within the library community since e-journals were made available in the market. As a matter of fact, academic libraries expect to offer access to electronic resources while simultaneously maintaining traditional print collections. Ten years ago, journal collections in public universities comprised of mixing print, fully electronic and dual-format subscriptions. Many of us believe that this approach will help the library to remain its role as warehouse of information besides enhancing access to scholarly contents. Back then, the future of electronic only version and its sustainability in academic library setting were very much speculative. Apart from that, adequate budget allocation allowed Malaysian academic libraries to subscribe to both formats and continue experimenting with e-journals.

In 2004, selected major international publishers introduced e-only subscription model to Malaysian Public University Libraries. Among major attractions of e-only model as claimed by publishers include access to huge coverage of scholarly articles from both current and back issues since year 1996. Moreover, publishers’ platforms outstandingly offer dynamic and user friendly features to enrich users’ information discovery experiences. A report by the American College and Research Libraries (ACRL) entitle ‘The E-Only Tipping Point for Journals: What’s ahead in the print-to-electronic transition zone’ summarized four (4) driving change factors among librarians; user expectations and demands, reallocation of resources to support

demand, acquisitions budgets, operational savings and space constraints (Richard K. Johnson and Judy Luther, 2007).

Our initial projections over the last decade that subscription to e-journals will be inexpensive compared to print journals is not true. Today, Malaysian Public University Libraries are dealing with only small number of commercial, society and scholarly publishers that are dominating in the global publishing industry. The Malaysian Public University Libraries are spending huge amount of financial resources to subscribe to Big deal package offered by the selected few dominating publishers. Since 2009, Consortia pricing in Malaysia indicated significant impact for academic libraries in dealing with large packages or bundles. In fact, early adoption of electronic books or e-books in selected new public universities was initiated by the Malaysian Online and E-Resources Consortia. This consortia arrangement is remarkably successful in acquiring sufficient funding for subscription to common highly used databases for public universities. Nevertheless, Public University Libraries in Malaysia are still striving towards achieving true spirits of consortia purchasing while making scholarly contents more accessible to the nation.

ANALYSIS AND TRENDS

This paper analyses subscription data of 20 Malaysian Public University libraries for two years covering 2016 to 2017. Data collection conducted by the Malaysian Online e-Resources Consortium (MOLEC) shows that more than thirteen (13) public university libraries reported budgetary decreases in year 2017 while seven (7) others were granted with additional budget allocation. Unexpectedly, data analysis shows that selected university libraries experienced almost 50% to 70% budget cuts in the fiscal year. Nevertheless, small number of university libraries was successfully justified for 20 to 25 percent budget increases within this context.

It is interesting to note that the Malaysian public university libraries subscribed to more than 554 databases covering e-journals, e-books, e-reference, discovery tools, library tools and aggregator resources in year 2016. As expected, budget cuts in 2017 have significantly reduced the libraries purchasing power and only 493 databases were collectively offered to the library users in the public universities. Within the specified budget in 2017, only four (4) institutions were able to maintain

subscription to the same number of databases or e-resources. Other institutions are obviously facing challenges to survive in terms of securing access to digital scholarly contents. It turns out that many factors are forcing e-resources pricing including foreign exchange rates, number of titles coverage, merging of publishers, and acquisition of high-impact journal titles, changes of subscription models, enhancement of publisher's platform, provisions of archival rights and many others. Therefore, it is almost impossible for one library to secure renewals for all the subscribed titles even with the same amount of budget allocated in the previous year.

Data analysis also highlights an interesting fact about growing number of subscription duplication across public university libraries. At least 18 databases were subscribed by five (5) different institutions in Malaysia. *ScienceDirect* appears to record the highest number of subscribers (15 institutions) and followed by both *IEEE Explore* and *ACM Digital Library* (14 institutions). This figure suggests that 50% of the public university libraries in Malaysia have strong interests towards scholarly contents available on *ScienceDirect* platform. Electronic journals platforms are dominating the top ten (10) most duplicate subscriptions besides library tools, economic and financial research data.

Strong needs towards e-books subscriptions and acquisitions for all institutions are not manifested in the subscription listing. Libraries are seen are providers to specialised e-books contents offered by subject-focused publishers rather than investing into huge e-book packages. While analysing budget allocation for 20 institutions during challenging economic situation, current listings of subscribed databases reflect the most required resources for each institutions. It briefly describes how libraries are dealing and coping with budget realities.

KEY CHALLENGES

Most academic libraries look to direct funding from their institution to support library operations including collection development programs. Managing electronic resources is very much depending on the overall budget allocated for academic libraries to support both development of information resources and information infrastructures.

New Technologies, New Requirements

Shifting from print medium to electronic resources indicates that academic libraries are ready to transform their physical infrastructures, network capabilities and accessibilities as well as provisions towards digital and electronic services. For instance, Online Public Access Catalogues (OPAC) is no longer adequate to help library users discover relevant resources and retrieve significant information for their teaching-learning and research works. Additional investment on efficient discovery service is already mandatory for academic libraries to ensure efficient access to licensed electronic resources. In actual situation, academic libraries are maintaining licensing to both integrated library systems and Resource Discovery Service (RDS) as well as other relevant solutions such as remote access systems and software and other related monitoring tools. This scenario also suggests that providing access to Information Discovery Services or Resource Discovery Services is already part and parcel of the academic library roles and responsibilities towards users.

The one-stop shop experience offered by RDS was regarded as a major step forward in terms of enhanced user experience. Access to almost all library resources through a single interface linked to full text was perceived as meeting the demands of students, particularly those of undergraduates. For this reason, the participating libraries were highly satisfied with their RDS and with the way users could search across resources and retrieve quality academic content. (UKSG, November 2013).

Big Deal Package

Big Deal Subscription was first introduced by Academic Press (AP) in 1996, providing access to large bundles of electronic journals published by AP. Big Deal package was once considered as a definite solution to serial crisis faced by librarians and academic libraries. Scholarly printed journals that used to be expensive were made available at an affordable price. For that reason, Big Deal Subscription Package was welcomed by academic libraries across the globe as Just-in-Time (JIT) initiative. Pricing became a push factor for academic libraries to shift from print

journals to electronic only journals. Basic question was, why pay more for limited number of journal titles while libraries can have full access to huge collections of high impact e-journals?

However, the Big Deal Subscription is no longer perceived as success story for academic libraries in Malaysia. The Malaysian Public University Libraries discovered that the Big Deal Package can eventually consumed most of their serials budget. It is now a major challenge for academic libraries to secure access to selected Big Deal Package such as *ScienceDirect*, *SpringerLINK*, *IEEE Explore* and many others. We begin to notice that for the next ten years, most of the Malaysian Academic Libraries can only sustain access to one Big Deal Package Subscription if budget allocation remains constant. According to Anderson (2011), three (3) issues and concerns related to the Big Deal are budgetary concerns, policy concerns and systemic concerns.

“From a *budgetary* perspective, purchasing journals in this manner essentially reduces an institution’s budget to a handful of large fixed-block expenditures, seriously undermining any budget flexibility.” (Richard Poynder, 2011)

Effective Consortia Purchase

The emergence of e-resources in the Malaysian academic libraries led to formation of Commercial Database Committee (CDC) in 2000. CDC served as an excellent platform for academic Libraries to evaluate, select, negotiate and manage the online electronic journals databases subscription. However, CDC’s most successful achievement is towards providing huge and high impact exposures towards electronic resource management among library managers and practitioners in Malaysia. After 17 years of its establishment, CDC’s roles and responsibilities remain relevant to the Malaysian Public University Libraries as e-resources are expanding rapidly, but with many uncertainties.

For that matter, CDC was then rebranded as Malaysian Online e-Resources Consortium (MOLEC) in 2010 to better serve as a truly consortium body to the Malaysian Public University Libraries. MOLEC demonstrates the highest achievement in securing additional funding from the Ministry of Higher Education (MOHE) since year 2009. The Malaysian Public University Libraries are benefiting from MOHE Consortia that provide access to common databases notably *Scopus*, *EBSCOHost Academic Search Premier*, *EBSCOHost Business Source Complete*, *ProQuest Dissertations & Theses* and *OCLC's WorldCat Discovery*.

Questions arise whether MOLEC has already successful in providing solutions to the Malaysian academic libraries in critical issues related to consortia subscription deal and cost efficiency. At present, MOLEC is still relevant as the only information sharing platform for library managers and practitioners is issues related to databases pricing, negotiations and licensing matters.

Staffing Changes and New Competencies

It is interesting to note that libraries are dealing with new environment and new technology that required new skills and competencies level. Managing electronic resources is complicated because the academic libraries in Malaysia are exposed to global economic situations, new business experiments, changing technology, legal and copyright restrictions and many others. These external factors are impacting us in all aspects including the library profession and the new skills and qualities required for librarians. Conger (2004) suggests that the librarian must be able to meet the many changes of the electronic environment with adroitness and a weather eye towards future filled with a more change.

In this context, electronic resource librarian or a particular librarian in-charged for managing electronic resources must have these qualities; flexibility, multitasking, problem solving and technological capability (Weir, 2012). We are facing with challenging job tasks and enlightened library leaders to make decisions that are

relevant for another decade, at least. This scenario reminds us about our previous high impact decision to shift from print materials to combined print-electronic subscription and lastly to electronic only subscription. Looking back, our knowledge and experiences did not allow us to predict the future of electronic resources and foreseen this reality. Nowadays, more information is available to more readers than ever before making prices higher than ever before!

STRATEGIES AND INITIATIVES

The Malaysian Public University libraries were optimist about the promising future of electronic resources for academic libraries globally. Our community has successfully adopted relevant and required technologies related to electronic resource management. In fact, selected academic libraries in Malaysia are employing emergence technologies to better serve their users. With regards to electronic resource management, we have seen selective participation in determining the future of electronic resources in the Malaysian academic libraries or in the smaller contexts – the Malaysian Public University Libraries. We are still experimenting with relevant resources and easy to customize technologies to fulfil specific institutional needs and requirements. At the end, resources were not sustained and we are heading towards adopting financial-based decision making for electronic resources. This paper outlines specific initiatives than can be explored wisely by the Malaysian Public University Libraries.

Access versus Ownership

Access versus ownership is still an interesting point of debates among librarians, information providers and financial decision makers. Librarians are still striving towards providing access to archival contents even in the electronic environment. Giant publishers that offer Big deal packages optimize this situation by offering two subscription components including core titles and access to full collections. The core titles component represents contents that we own perpetually and will be made accessible to users via publisher's platform with applied terms and conditions. However, the academic librarians in Malaysia are facing the same challenges with libraries globally.

Many find ourselves struggling with: large, inflationary price increases, decreasing budgets, and fluctuating exchange rates creating budget uncertainties (Bosch & Henderson, 2015). Very few options that are available to libraries include cancellation to core titles, cancellation to the full collections segment or cancellation to the whole packages. Based on institutional needs and limited budget situations, focusing on access rather than ownership is seen viable to libraries. In 2017, UniMAP has decided to move from the combined access with ownership subscription oriented package to access only options for selected databases.

What's In Store?

There are many factors to be considered in deciding on electronic resources renewal and cancellations. Based on my personal experience in the institutional context, deciding on cancellations is always tougher than justifying for databases renewal. In many situations, the academic libraries in Malaysia will sought for cancellation if the last attempts for price negotiations failed. Interestingly, our scope of negotiations is limited to present subscription model, its terms and conditions and possible discounted rates. It is advisable for electronic resource librarians or serials librarians to collect information on other subscription packages which are available on other consortia websites. Dedicated websites such as International Coalition of Library Consortia (<http://icolc.net/>) or dynamic consortia such as Council of Australian University Librarians or CAUL, Council of New Zealand University Librarians (CONZUL) will provides information on huge listing of offers from publishers.

Digital Archiving

Since 2009, the Malaysian Public University Librarians were exposed to digital archiving or digital preservation program that is available in the market covering PORTICO, CLOCKSS and LOCKSS. However, aspects related to digital asset management is often overlooked by library administration and understated in library operations (Oehlerts, 2013). The Malaysian Public University Libraries are focusing solely on securing access to electronic resources through subscription renewals rather than preserving digital contents for perpetual access. Therefore, access to licensing contents is not made possible in many trigger events when titles are no longer available from the publisher or other sources.

Trust and Readiness towards Cooperative Collection Development

Resource sharing is always considered key to collective development for all the Malaysian Public University Libraries. Many resource sharing platforms in the academic libraries such as Document Delivery Service, participative contents development through repositories, training and development are created based on mutual cooperation. However, resource sharing in changing environment of digital contents is not fully explored by the Malaysian Librarians. Number of duplicate database subscriptions is still high as reported by the Malaysian Online e-Resources Consortia (MOLEC) in 2001 and 2017 even in challenging budget situations. In similar context, the number and type of resources we must acquire with our limited collections budgets are greater and more diverse (Jakubs, D.L., 2013). As such, our institutional commitments and directions towards strengthening individual library collections to serve the dedicated community are no longer efficacious. Strategies and initiatives towards cooperative collection development are urgently needed to address future challenges; collection development in the institutional niche areas for digital contents, cooperative archiving platforms, participative repositories and digital preservations.

High Impact Consortia

Library Consortia will continue to play an important role in achieving cost savings to libraries through effective negotiations and collaborations. As Burk (2010) pointed out those consortia become more important than ever as library budgets shrink and the old ways of operating become economically flawed. Very often, consortia pricing in Malaysia is creating more values for publishers and vendors rather than the member libraries. The Malaysian Public University Libraries are seen to encourage more participating libraries in the consortia to reduce subscription rates for individual institutions.

This approach intends to help publishers and vendors to optimize their market segments rather than contributing towards cost efficient consortia purchasing. For future endeavours, Malaysian Online e-Resources Consortium should be able to expand its roles and responsibilities in other resource sharing strategies that include attracting more participating members, strengthening loose consortia purchase, flexible access to digital contents via access fees and tokens, Pay Per View (PPV)

options for small scale libraries and colleges, and implementing cooperative digital preservations. The Malaysian Online e-Resource Consortium is also critically needed to examine opportunities towards greater access to scholarly contents through Open Access (OA) movements. Optimizing OA models can definitely help libraries to achieve large savings as OA dissemination is considerably lower than the prices of subscription based journals.

Survival and Sustainability

Managing electronic resources in the academic libraries is no doubt; involve a complex and complicated process. New generation of academic librarians are facing with great challenges in understanding and mastering various pricing models of electronic resources and changing subscription packages which is always towards the publishers' advantages. Broad knowledge, communication skills and in-depth experience of Electronic Resource Librarians will ensure survival and sustainability of the academic libraries in Malaysia in this digital era. Shahbazi, R and Hedayati, A (2013) identified eight (8) newly emerging-IT based librarian job titles covering Systems Librarian, Metadata Librarian, Electronic Resources Librarian, Digital Archivist, Web Services Librarian, Digital Initiatives Librarian, Digital Librarian and Emerging Technologies Librarian.

The findings suggest that the 21st Century Librarians must be able to optimize the IT-based opportunities to solve numerous challenges in electronic resource management. For example, decision to cancel expensive and highly used subscription packages need to be accompanied by relevant strategies such as Pay Per View service option, article delivery via ReadCube, well planned digital preservation and archiving, customization of open source platforms and many others.

CONCLUSION

Managing electronic resources will continue to be part and parcel of the academic librarian's roles and responsibility. Dynamic changes in publishing ecosystems will also continue to affect the academic libraries approach and strategies towards

providing timely and relevant access to scholarly communication. The Malaysian Public University Libraries need to collaborate towards cooperative digital content development, national initiative for digital preservation and enhancing roles of the Malaysian Online e-Resources Consortium to face numerous socio-economic situations.

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